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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,536	01/30/2006	Arakkal Abdul Khader Lathief	A06493US (126.2)	5908

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EXAMINER
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KWIECINSKI, RYAN D

ART UNIT	PAPER NUMBER
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3635

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/19/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/566,536

Applicant(s)

LATHIEF, ARAKKAL ABDUL  
KHADER

Examiner

Ryan D. Kwiecinski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 1/30/2006.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: Definition Sheet.

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Drawings***

The drawings are objected to because of the following informalities:

(1) The drawings do not include reference characters to fully disclose the applicant's claimed invention.

"The reference characters must be properly applied, no single reference character being used for two different parts or for a given part and a modification of such part. Every feature specified in the claims must be illustrated." MPEP § 608.01(g).

(2) Fig. 8 is really two figures, the detailed view on the right should be given a separate figure number. The lead line leading from "Part 1 – Male" to "Detail – A" should be deleted.

Appropriate correction is required.

### ***Specification***

The specification is objected to because of the following informalities:

(1) The specification does not include reference characters to fully disclose the applicant's claimed invention.

"The reference characters must be properly applied, no single reference character being used for two different parts or for a given part and a modification of such part. Every feature specified in the claims must be illustrated." MPEP § 608.01(g);

(2) All improper capitalization in specification should be amended. For instance, Page 1, line 2 of "Technical Field", the word "Glass" should not be capitalized, etc.;

(3) Throughout the specification, "Fig" or "Figs" must be changed to --Fig.--or --Figs.--;

(4) Page 3, line 3 of "Method of Industrial Application of the Invention" section, change "Fulerum" to --fulcrum--;

(5) Fix the grammar problem in the first sentence of "Technical Background" section.

Appropriate correction is required.

### ***Claim Objections***

**Claims 1-2, 4-6, 11, and 13 are objected to because of the following informalities:**

**Claim 1, line 2,** "Glass" should be changed to --glass--. Further, the recitation of "when glass is placed on the female profile" is vague, indefinite, and confusing. Is Applicant claiming a sheet of glass or a water glass?

**Claim 1, lines 2-3**, the recitation of "the female profile" and "the male profile", lack antecedent basis because it is not clear if there recitations are referring back to the "two aluminum profiles" introduced in lines 1-2.

**Claim 1, line 4**, the recitation that "the male profile is inserted" is vague, indefinite, and confusing since it is not clear what the male profile is inserted into.

**Claim 1, line 4**, the recitation that "the mechanism further tightens grip on the glass edges when pushed into grooved rubber" is vague, indefinite, and confusing since it is not clear how the mechanism could further tighten its grip when no grip has been recited in the first place.

**Claim 2, line 5**, the recitation of "the leg interlocking with the gap" is vague, indefinite, and confusing. Since "gap" is defined as "a break or opening" or "an empty space or interval" (See attached), it is not understood how the leg of the male profile can interlock with the gap. Rather, isn't the leg of the male profile interlocking with a downwardly sloping protrusion on the upper leg of the two legs of the female profile?

**Claim 2, line 6**, the recitation of "the upper portion of the gap providing a support area for a glass which can be locked by the glazing system" is vague, indefinite, and confusing because it is not understood how a gap could provide a support area?

**Claim 2** recites the limitations "the opposite forces" in line 8. There is insufficient antecedent basis for this limitation in the claim.

**Claim 4, lines 2-3**, the recitation that "the leg of the male profile interlocks with the cavity" is vague, indefinite, and confusing because it is not understood how a leg

could interlock with a cavity. Rather, isn't the leg interlocking with the downward protrusion of the upper leg of the female profile?

**Claim 5, lines 1-2**, the recitation that "the leg of the male profile has an enlarged tip" is vague, indefinite, and confusing as lacking antecedent basis because it is unclear if this is referring back to the upper tip of the male profile introduced in line 4 of claim 2 or if it is in addition thereto.

Further, how can an enlarged tip interlock with a cavity?

**Claim 6, line 2**: It appears "direction" should be --directions--.

**Claim 6** recites the limitations "the forces" in line 1. There is insufficient antecedent basis for this limitation in the claim.

**Claims 6 and 7**, the recitations that "the male profile attempts to rotate" are vague, indefinite, and confusing. Does the male profile rotate or not?

**Claim 11, lines 1-2**, the recitation that "the upper portion of the gap for supporting the glass is flat" is vague, indefinite, and confusing. Isn't it the upper portion of the upper leg of the female profile that is flat?

**Claim 13, lines 1-2**, the recitations of "the female portion" and "the male portion" lack antecedent basis and the word "portion" in each base should be changed to --profile--.

**Claim 13, lines 1-2**, the recitation that the tips of the male and female profiles are at the same heights "when connected" is vague, indefinite, and confusing. It would be better if the claim recited "when the leg of the male profile is inserted into the gap of the female profile."

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-2, 6-8, and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,689,933 to Biro.**

**Claim 1:**

Biro discloses a self locking mechanism, composed of two aluminum profiles (101, 170, Fig.4; Column 1, lines 38-39) designed in such a way to self lock when glass is placed on the female profile (101, Fig.4) and the male profile (170, Fig.4) is inserted (101, 170, Fig.5) and the mechanism further tightens its grip on the glass edges when pushed in a grooved rubber (180, Fig.5; Column 5, lines 21-29).

**Claim 2:**

Biro discloses a self locking glazing system comprising:

(a) a female profile (101, Fig.4), the female profile having an upper tip (119, Fig.3), a base (from 116, Fig.3 to 110, Fig.3), and a gap (122, Fig.5), the

gap being located at the base, and the gap including upper and lower portions (116, 108, Fig.3);

(b) a male profile (170, Fig.4), the male profile having an upper tip (174, Fig.4), a leg (173, Fig.4), and a fulcrum (172, Fig.4);

(c) the leg interlocking with the gap (Column 4, lines 63-65); and

(d) the upper portion of the gap providing a support area for a glass (113, Fig.3) which can be locked by the glazing system; and

(e) wherein the opposite forces in opposite directions are placed on the respective tips of the male and female profiles (the glass is in contact with the tips, which in turn provide opposite forces on the tips of the glazing system).

**Claim 6:**

Biro discloses the self locking glazing system of claim 2, wherein the forces in opposite directions tend to cause the male profile to attempt to rotate in a direction opposite that of the female profile (170, Fig.5; the bottom leg 173 is engaged with the female profile therefore a force on the tip will cause the male profile to attempt to rotate in the direction of the force).

**Claim 7:**

Biro discloses the self locking glazing system of claim 6, wherein the male profile attempts to rotate around the fulcrum (172, Fig.4; since the fulcrum is the intermediate point of contact with the female profile, an outward force will cause the male profile to attempt the rotation about the fulcrum).

**Claim 8:**



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Biro discloses the self locking glazing system of claim 7, wherein the fulcrum rests on the base of the female profile (170, Fig.5).

**Claim 11:**

Biro discloses the self locking glazing system of claim 2, wherein the upper portion of the gap for supporting the glass is flat (113, Fig.3).

**Claim 12:**

Biro discloses the self locking glazing system of claim 2, wherein the lower portion of the base of the female profile is flat (108, Fig.3).

**Claim 13:**

Biro discloses the self locking glazing system of claim 2, wherein the tip of the female portion and the tip of the male portion are located at the same height when connected (the tips are equal height in Fig.5).

**Claims 2-13 are rejected under 35 U.S.C. 102(b) as being anticipated by US US 3,774,363 to Kent.**

**Claim 2:**

Kent discloses a self locking glazing system comprising:

(a) a female profile (1, Fig.1), the female profile having an upper tip (upper portion of 2, Fig.1), a base (from 3 to 23, Fig.1), and a gap (space

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between 3 and 23, Fig.1), the gap being located at the base, and the gap including upper and lower portions (23, 3, Fig.1);

(b) a male profile (8, Fig.1), the male profile having an upper tip (14, Fig.1), a leg (11, Fig.1), and a fulcrum (15, Fig.1);

(c) the leg interlocking with the gap (12,26, Fig.1); and

(d) the upper portion of the gap providing a support area for a glass (23, Fig.1) which can be locked by the glazing system; and

(e) wherein the opposite forces in opposite directions are placed on the respective tips of the male and female profiles (the glass is in contact with the tips, which in turn provide opposite forces on the tips of the glazing system).

**Claim 3:**

Kent discloses the self locking glazing system of claim 2, wherein the base of the female profile has a center (a vertical line splitting the base in half, Fig.1), and the leg of the male profile passes the center (the male leg 11, Fig.1 extends beyond the mid point of the base) when inserted into the gap.

**Claim 4:**

Kent discloses the self locking glazing system of claim 2, wherein the upper portion of the gap has a downwardly sloped portion (23, Fig.1) which ends in a cavity (the gap enclosed by 23, Fig.1), and the leg of the male profile interlocks with the cavity (26,12, Fig.1).

**Claim 5:**

Kent discloses the self locking glazing system of claim 4, wherein the leg of the male profile has an enlarged tip (12, Fig.1), which interlocks with the cavity.

**Claim 6:**

Kent discloses the self locking glazing system of claim 2, wherein the forces in opposite directions tend to cause the male profile to attempt to rotate in a direction opposite that of the female profile (8, Fig.1; the bottom leg 11 is engaged with the female profile therefore a force on the tip will cause the male profile to attempt to rotate in the direction of the force).

**Claim 7:**

Kent discloses the self locking glazing system of claim 6, wherein the male profile attempts to rotate around the fulcrum (15, Fig.1; since the fulcrum is the intermediate point of contact with the female profile, an outward force will cause the male profile to attempt the rotation about the fulcrum).

**Claim 8:**

Kent discloses the self locking glazing system of claim 7, wherein the fulcrum rests on the base of the female profile (12, Fig.1).

**Claim 9:**

Kent discloses the self locking glazing system of claim 2, wherein a vertical plane passing through the center of the glass will intersect both the male and female profiles, and also intersect the gap of the female profile and the leg of the male profile. (a vertical plane through the center of the glass will intersect the

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female profile at 23, 3, Fig.1 and the male profile at 11, Fig.1; the plane will also intersect the gap of the female profile)

**Claim 10:**

Kent discloses the self locking glazing system of claim 9, wherein the vertical plane will intersect both the upper and lower portions of the gap (a vertical plane through the center of the glass will intersect the female profile at 23, 3, Fig.1 and the male profile at 11, Fig.1; the plane will also intersect the gap of the female profile).

**Claim 11:**

Kent discloses the self locking glazing system of claim 2, wherein the upper portion of the gap for supporting the glass is flat (23, Fig.1).

**Claim 12:**

Kent discloses the self locking glazing system of claim 2, wherein the lower portion of the base of the female profile is flat (3, Fig.1).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan D. Kwiecinski whose telephone number is (571)272-5160. The examiner can normally be reached on Monday - Friday from 8 am to 5 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Friedman can be reached on (571)272-6842. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
RDK

  
Jeanette Chapman  
Primary Examiner

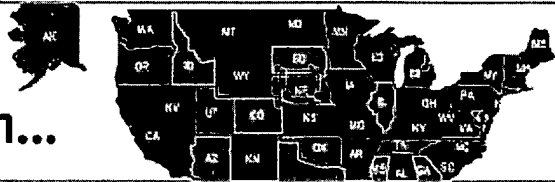
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gap [gap] Pronunciation Key - Show IPA Pronunciation  
noun, verb, gapped, gap·ping.

-noun

1. a break or opening, as in a fence, wall, or military line; breach: *We found a gap in the enemy's line of fortifications.*
2. an empty space or interval; interruption in continuity; hiatus: *a momentary gap in a siren's wailing; a gap in his memory.*
3. a wide divergence or difference; disparity: *the gap between expenses and income; the gap between ideals and actions.*
4. a difference or disparity in attitudes, perceptions, character, or development, or a lack of confidence or understanding, perceived as creating a problem: *the technology gap; a communications gap.*
5. a deep, sloping ravine or cleft through a mountain ridge.
6. *Chiefly Midland and Southern U.S.* a mountain pass: *the Cumberland Gap.*
7. *Aeronautics.* the distance between one supporting surface of an airplane and another above or below it.

-verb (used with object)

—verb (used without object)

9. to come open or apart; form or show a gap.

[Origin: 1350–1400; ME < ON *gap* chasm]

—Related forms


gapless, adjective

—Synonyms 2. pause, interstice, break, interlude, lull.

Dictionary.com Unabridged (v 1.1)

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American Heritage Dictionary – Cite This Source

gap  (gāp) Pronunciation Key  
n.

- a. An opening in a solid structure or surface; a cleft or breach: *wiggled through a gap in the fence; a large gap in the wall where the artillery shell had exploded.*
- b. A break in a line of defense.
- c. A conspicuous difference or imbalance; a disparity: *a gap between revenue and spending; the widening gap between rich and poor.*
- d. A problematic situation resulting from such a disparity: *the budget gap; the technology gap.*
2. An opening through mountains; a pass.
3. A space between objects or points; an aperture: *a gap between his front teeth.*
4. An interruption of continuity: *a nine-minute gap in the recorded conversation; needed to fill in the gaps in her knowledge.*
5.
  - a. A conspicuous difference or imbalance; a disparity: *a gap between revenue and spending; the widening gap between rich and poor.*
  - b. A problematic situation resulting from such a disparity: *the budget gap; the technology gap.*
6. A spark gap.
7. *Computer Science* An absence of information on a recording medium, often used to signal the end of a segment of information.
8. *Electronics* The distance between the head of a recording device and the surface of the recording medium.

v. gapped, gap·ping, gaps

v. *tr.*

To make an opening in.

v. *intr.*